

## **REMARKS FOR ADMINISTRATOR BOLDEN**

### **SPACE GENERATION CONGRESS**

**Sept. 24, 2016**

It's so wonderful to be here at another Space Generation Congress. I think I've spoken to this group just about every year since I've been Administrator of NASA. I've done this not out of a sense of duty, but more so because my engagement with you and young people everywhere has provided me with inspiration to guide NASA and help shape our future in space.

I may not know each of you individually, but I have come to know the Space Generation Congress. Having committed yourselves to the cause of space exploration, I know you realize the great responsibility each of you have. You have chosen to embrace the colossal challenges presented by space exploration. That's very exciting and it also says something about your character. What you may not realize is the degree to which others of your generation and future generations will come to rely on you.

Believe me, I never could have imagined the opportunities I would be given to advance the interests of my generation, having grown up in the segregated South of the U.S. There wasn't even a space program to dream about. I didn't see myself as a pilot when I was a young man, but that ultimately proved critical to my path to space. The obstacles didn't end there, because the U.S. space program at the time I graduated from college didn't have any people who looked like me. It took the Space Shuttle Program and the expansion of the astronaut corps to include women and people of color to make it possible for someone like me to fly to space four times, command a mission with a Russian cosmonaut for the first time, and now lead a space program that I continue to work on diversifying, both in workforce and portfolio.

In the past seven years since I've been privileged to lead NASA, the science fiction we have transformed into science fact has been incredible. From the first flight in space of *Orion*, our next spacecraft to carry humans to deep space, to the *Curiosity* rover's nerve-wracking descent to the planet's surface, from *New Horizons* reaching Pluto for the first time ever, to the discovery of planets potentially like Earth in the habitable zones of

their stars many light years away, to advances in solar electric propulsion and supersonic flight.

As proud as I am of the accomplishments of my generation in space, I have even higher expectations for yours. Today, we are on a Journey to Mars. In fact, we're closer to the Red Planet than we ever have been in human history. I know your working groups pursued aspects of that journey, and that's wonderful, because it's the biggest thing humanity has ever done. It's going to change who we are and what we believe about ourselves.

But as your generation takes up the reins and works collaboratively among international and industry partners to press forward on not only human missions to Mars but the entire range of missions our field represents, you can be certain that obstacles and challenges – many which may seem unsurmountable – will block your path.

Over my career, I've learned that that bigger the problem, the bigger the opportunity, and that great obstacles, when overcome, yield enormous reward. Trust me – you will face adversity. You will encounter failures. But I implore you to persevere.

Perhaps today more than ever before, the world needs what you have to offer -- people from many nations, cultures, and religious beliefs working together to deliver bold accomplishments in space and raise the bar of human achievement.

One of the best things our many nations' space programs can provide is the inspiration for all of you to make your own giant leaps. To build on what we're doing today and travel farther into the solar system, make new technological breakthroughs and build new partnerships to carry the legacy forward for those who will follow you.

Our modern space program is integrated with partners around the globe. From India, to United Arab Emirates to Kenya and many others, NASA has partnered in recent years with nations beyond the scope of our traditional work and are the better for it.

I want all of you to know that we need you -- all of your perspectives and talents -- and I hope you will continue in the path you have chosen that brought you here as delegates to this distinguished Congress.

The first person to land on Mars is in a classroom right now, or just beginning their career. Does that sound like anyone in this room? I am fully confident the first crew to reach Mars will represent the full racial, ethnic and gender diversity of our world. In fact, it's essential that it does, so that we gain strength from the talents and perspectives of people who have not traditionally been well represented in the STEM fields.

I think we're never going to leave space now that we're there. Even with the finite life of the International Space Station, there's just too much else going on, from commercial entities getting involved in low Earth orbit and cis lunar space to our eventual establishment of missions on Mars.

At NASA, we're proud of our accomplishments, but behind the scenes, it all comes down to a lot of planning, a lot of smart people collaborating and compromising. And above all, a shared vision of how we can raise the bar of human potential.

Our missions demand decades, even generational planning. But beyond technical milestones, the legacy we must pass on is inspiration.

That's something I hope my generation has provided you, but now, even at this stage of your lives, maybe precisely because you are young and making important choices, you too can provide that inspiration to those who follow. In your families and communities. In your workplace. Because we need not only technical expertise, we need hearts and minds engaged around the world to do these big things.

What I can say is, enjoy the ride. Enjoy the journey that could culminate with a lifetime's dream and a first for humanity.

At the end of the day, what we do off the Earth is for the Earth, and it's my privilege to have shared that journey with all of you for the last seven years. I look forward to what the Space Generation accomplishes. I know it's going to be fantastic. Now, go and enjoy the IAC! Thank you.